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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,898	09/29/2003	Adam Weisz-Margulescu	18099 (AT 20958-60)	1982

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EXAMINER

NINO, ADOLFO

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,898

Applicant(s)

WEISZ-MARGULESCU ET AL.

Examiner

Adolfo Nino

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 is/are allowed.
- 6) ☒ Claim(s) 10-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The new term “a freestanding structure” in the claims is not properly disclosed in the specification. The Examiner is confused as to what exactly the Applicants mean by “a freestanding structure”.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amended independent claims 10 and 19 contain the following subject matter that was not described in the specification: “a freestanding structure”. What exactly do the Applicants mean by “a freestanding structure”?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-13, 15, 16, 19, 20, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura (US 4,223,177).

Regarding claim 10 (currently amended), as best understood by the Examiner, Nakamura discloses an electronic package (fig. 1) comprising: an electronic assembly (2) overmolded with a capsule layer (5) into a freestanding structure, said electronic assembly (2) configured to output a signal in response to a condition of a monitored object; a housing (11) having a bore therein configured to receive said overmolded electronic assembly (2); and one of said capsule layer (5) and said housing (11) comprising a latch (13) configured to engage the other of said capsule layer and said housing (figs. 2A/B).

Regarding claim 11 (currently amended), Nakamura discloses an electronic package (fig. 1) in accordance with claim 10 wherein said housing (11) comprises a longitudinal axis (fig. 1) and a positioning aperture (at 12) extending transversely to said longitudinal axis (fig. 1).

Regarding claim 12 (currently amended), Nakamura discloses an electronic package (fig. 1) in accordance with claim 10 wherein said electronic assembly (2) includes at least one sensor (col. 2, lines 35-37).

Regarding claim 13 (currently amended), Nakamura discloses an electronic package (fig. 1) in accordance with claim 12 wherein said sensor (2) is a hall effect sensor (col. 2, lines 35-37).

Regarding claim 15 (currently amended), Nakamura discloses an electronic package (fig. 1) in accordance with claim 10 wherein said housing (11) comprises a longitudinal axis (fig. 1), and an elongated positioning opening (not marked, but it would be the opening at 12) extending transverse to said longitudinal axis (fig. 1).

Regarding claim 16 (currently amended), Nakamura discloses an electronic package (fig. 1) in accordance with claim 10 wherein said housing (11) comprises a mounting stud (13).

Regarding claim 19 (currently amended), as best understood by the Examiner, Nakamura discloses a method of packaging an electronic assembly (2) subject to a severe operating environment (col. 1, lines 13-15), said method comprising: encapsulating the electronic assembly (2) to form a sealed immersible electronic module (1, 5, 9; fig. 1; col. 2, line 52 thru col. 3, line 21) into a freestanding structure; fitting the encapsulated electronic assembly (2) into a housing shell (11); and securing the encapsulated module (1, 5, 9) to the housing shell (11; figs. 1-2B).

Regarding claim 20 (currently amended), Nakamura discloses a method in accordance with claim 19 wherein said encapsulating the electronic assembly (fig. 1) comprises overmolding the electronic assembly (fig. 1).

Regarding claim 23 (currently amended), Nakamura discloses a method in accordance with claim 19 wherein fitting the encapsulated module (1, 5, 9) to the

housing shell (11) comprises inserting an end of the encapsulated module into an end of the housing shell, and sliding the encapsulated module into the housing (fig. 1).

Regarding claim 24 (currently amended), Nakamura discloses a method in accordance with claim 19 wherein one of the encapsulated module (1, 5, 9) and the housing shell (11) includes a latch member (13) formed therein, said step of securing the encapsulated module (1, 5, 9) to the housing shell (11) comprising engaging the latch member (13) to the other of the encapsulated module and the housing shell (fig. 1).

Claims 19, 20, 22, 23 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Groenewegen (US 4,694,119).

Regarding claim 19 (currently amended), as best understood by the Examiner, Groenewegen discloses a method of packaging an electronic assembly (24) subject to a severe operating environment, said method comprising: encapsulating the electronic assembly (24) to form a sealed immersible electronic module (22) into a freestanding structure; fitting the encapsulated electronic assembly (24) into a housing shell (12); and securing the encapsulated module (24) to the housing shell (12; fig. 1).

Regarding claim 20 (currently amended), Groenewegen discloses a method in accordance with claim 19 wherein said encapsulating the electronic assembly (fig. 1) comprises overmolding the electronic assembly (fig. 1).

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Regarding claim 22, Groenewegen discloses a method in accordance with claim 19 wherein fitting the encapsulated module to the housing shell (fig. 1) comprises inserting the encapsulated module into a thixo-molded housing (fig. 1).

Regarding claim 23 (currently amended), Groenewegen discloses a method in accordance with claim 19 wherein fitting the encapsulated module to the housing shell (fig. 1) comprises inserting an end of the encapsulated module into an end of the housing shell, and sliding the encapsulated module into the housing (fig. 1).

Regarding claim 25 (currently amended), Groenewegen discloses a method in accordance with claim 19 wherein the electronic assembly (24) includes a cable (30), said step of encapsulating the electronic assembly (24) to form an electronic module (22) comprising overmolding the electronic assembly (24) and a portion of the cable (fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (US 4,223,177) in view of Little et al. (US 6,920,050 B2).

Regarding claim 14 (currently amended), Nakamura discloses an electronic package (fig. 1) in accordance with claim 10, **except for** wherein said capsule layer comprising a melt processible rubber. Little et al. teach that it is known to provide enclosures comprising a rubber as set forth at column 1, lines 41-43. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Nakamura's capsule layer comprising of a melt processible rubber, as taught by Little et al. in order to provide a stronger protection from moisture and dust. **Moreover**, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Nakamura's capsule layer comprising of a melt processible rubber, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 21 (currently amended), Nakamura discloses a method in accordance with claim 20, **except for** wherein said overmolding the electronic assembly (fig. 1) comprises overmolding the electronic assembly with a melt processible rubber.

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Little et al. teach that it is known to overmold an electronic assembly with a melt processible rubber as set forth at column 1, lines 41-43. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Nakamura's overmolding the electronic assembly be comprised with a melt processible rubber, as taught by Little et al. in order to provide a stronger protection from moisture and dust. **Moreover**, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Groenewegen's capsule layer comprising of a melt processible rubber, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claim 18 (currently amended) is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (US 4,223,177) in view of Ducza et al. (US 4,528,932). Groenewegen discloses an electronic package (fig. 1) in accordance with claim 10, **except for** said electronic assembly (fig. 1) comprising a magnetic plate, said magnetic plate positioned beneath said circuit board and encased in said capsule layer. Ducza et al. teach that it is known to provide a magnetic plate as set forth at column 1, lines 6-20. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Nakamura's electronic package further comprise a magnetic plate, as taught by Little et al. and positioning the magnetic plate beneath the circuit board in order to provide information as to when the capsule layer moves.

Allowable Subject Matter

Claims 1-9 are allowed.

Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

With respect to claims 1-9, the cited prior art does not disclose, teach or suggest, alone or in combination, the claimed electronic package comprising: a compressible capsule layer encasing a circuit board and in intimate contact therewith forming a sealed immersible electronic module; and a housing receiving an outer surface of and press fit to said electronic module and forming a protective shell around said electronic module.

The following is a statement of reasons for the indication of allowable subject matter: With respect to claim 17, the cited prior art does not disclose, teach or suggest, alone or in combination, the claimed electronic package comprising at least one indicator bar coupled to said housing to visually indicate the condition of the monitored object.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's arguments, see REMARKS section on Amendment, filed 12/27/05, with respect to claims 1-9 have been fully considered and are persuasive. The rejections of claims 1-9 have been withdrawn. The Examiner agrees with Applicants that Groenewegen does not disclose a capsule layer in intimate contact with a circuit board.

Applicant's arguments with respect to claims 10, 14, 18 and 21 have been considered but are moot in view of the new ground(s) of rejection.

Regarding currently amended independent claim 19, Applicant's arguments filed 12/27/05 have been fully considered but they are not persuasive. Regarding claim 19, the Examiner respectfully disagree with the Applicants that Groenewegen does recite a method of packaging an electronic assembly as claimed in independent claim 19. Please see above the objections and rejections made regarding currently amended independent claim 19.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Burnham et al. (US 3,256,382) disclose seal constructions for electrical devices.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adolfo Nino whose telephone number is (571) 272-1981. The examiner can normally be reached on M-F (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on (571) 272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AN


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SUPERVISORY PATENT EXAMINER
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